



Future Design School young innovators engaging in a leadership challenge at Young Innovators Camp in the MaRS Discovery District.
Future Design School photo

Creating Future Designers: It Starts in the Classroom

Sarah Prevette

In an exceptional example of Canadian innovation, Sarah Prevette has deconstructed the qualities that make entrepreneurs and transformed them into teachable components that are being transferred to the next generation of Canadian innovators. Here's her prescription, based on that experience, for fostering innovation the way we teach other valuable knowledge and skills: in the classroom.

When we think about education, we need to be asking ourselves; how do we prepare kids for a rapidly changing world?

The current global landscape reveals an increasingly uncertain future, characterized by political instability and cultural intolerance. The colliding global factors of climate change, rising populism and scarcity of finite resources are dramatically reshaping the reality that today's youth will face.

The time is now for Canada to re-vamp our education system and ensure that we are equipping students with the skillsets they need to adapt, adjust and problem-solve as required. We need to infuse our youth with the creative confidence and personal impetus to innovate the many solutions that will be required to address the problems of the future. This is Canada's moment to showcase our unique capability for leveraging diversity of thought, skill and talent to foster a culture of innovation that focuses on solving the world's most pressing issues.

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We cannot predict the jobs that today's kindergarteners will be graduating into, or how their world might be altered by the widespread adoption of technologies such as artificial intelligence, quantum computing or new technologies that have not yet been invented. However, we do know, without any shred of doubt, that automation will continue to change employment opportunities and will render many traditional roles obsolete.

We need not wait until our primary students make it into the job market to see the impact of the changes on our workforce. The WEF estimates that one-third of the skillsets required to perform today's jobs will be "wholly new" by 2020. Our economy faces an immediate upheaval, and many participating in today's workforce will quickly find themselves in need of major up-skilling over the next several years. The transformation is well underway and we have a responsibility as a country to proactively set up the infrastructure to support those affected by the transition.

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Through ongoing consultations over the past year, the federal government has gained considerable insights into the unfolding technology revolution and in the latest budget announced new measures, including \$225 million towards the creation of a new skills agency and an additional \$150 million for investing in emerging technology clusters. Under the thoughtful stewardship of Hon. Navdeep Bains, minister of innovation, science and economic development, Canada's innovation agenda has taken shape and is helping coalesce an action plan for the future. While these measures are indeed encouraging, there is still much work to be done.

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At Future Design School, we believe that it is time to raise the bar in every classroom across the country. We need to increase our expectations and realize that kids are capable of far more than the work that they are currently producing. We need to re-focus education on empowering student innovation and building entrepreneurial mindsets. With an uncertain future, cultivating resourcefulness and creative prowess should be placed at the very forefront of learning. There is a pressing impetus to look at the ubiquitous traits that make our entrepreneurs successful and determine how best to cultivate these attributes within every student from coast to coast.

Great entrepreneurs have fantastic imaginations, are wildly optimistic and see the potential that exists within every challenge. They tend to have insatiable curiosity and possess remarkable abilities to connect seemingly disconnected ideas. Successful entrepreneurship relies on gaining profound insight into the nuances of issues; developing deep empathy for the needs of others and building solutions that are iterative by nature. Innovative leaders are dedicated to ongoing experimentation, commit themselves to continuous improvement and understand that failure is

Education is under provincial jurisdiction, and our school systems are in need of reform.

a necessary part of the innovation process.

We believe that schools can cultivate these entrepreneurial traits in all students through enabling real world experiences that allow children to fail forward. Schools need to see themselves as sandboxes where kids can experiment, find inspiration, try out new ideas and fail without penalty. Engaging students through their own interests and encouraging them to pursue projects with sustained inquiry means re-thinking existing frameworks. Traditional timetables with prescribed allotments for subjects are far too limiting and impede world-class learning. In fact, the very idea of having specific subjects needs to be re-examined. Allowing exploratory learning means giving students personalized choice and giving them the latitude to learn at their own pace.

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The curricula in provinces across Canada are continuously being assessed and augmented, and in some cases, such as in British Columbia, the curriculum has recently been overhauled in order to better support this type of investigative learning. Even without full-scale infrastructure change, teachers in every community can take advantage of the latitude they have in choosing how best to cover ministry expectations, even if they are unable to change the subject matter they cover. We have seen amazing examples of teachers who, after engaging in

our professional development, have overhauled entire grades and courses to implement new types of learning that foster future-ready skills. With the right tools and teachers; innovative learning is within our reach.

To create schools that develop future designers and change agents, we need to actively empower the most important cultivators of this type of learning—our educators. We need to grant teachers greater flexibility in determining the best ways to construct learning experiences for their students. Teachers need to see themselves as facilitators who are focused on helping students to ask the right questions, rather than keepers of knowledge or oracles with answers. Teachers need to feel empowered to deliver project-based learning that is personalized to each student's interest, differentiated to their learning style and capability, and covers multiple disciplines and expectations throughout the process. If we want to truly cultivate entrepreneurial students, then we need to start by building entrepreneurial teachers.

We need to empower our teachers to take risks and give them the agency to facilitate learning that has uncertain outcomes. That means greater autonomy in determining assessments and tearing down the barriers that are keeping teachers from experimenting and being innovative themselves. We need a system that actively advocates and supports our educators to be entrepreneurial. We need to take a careful look at what we are prioritizing, and the culture it creates in schools. Innovation in schools will not be possible without cultivating innovative culture—and culture starts at the very top.

We need leaders in all of our provinces to place an emphasis on innovation in school. In order for Canada to seize our moment on the innovation stage, we must ensure that all schools across the country are fueling curiosity, enabling the exploration of ideas

and giving students impactful, real-world learning experiences.

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Education needs to be re-focused on fostering innovation. It needs to place a greater emphasis on the journey of learning, and less on the final outcome, more on the questions and less on the answers. Students should be actively engaged in solving real problems facing their communities; acquiring new skills and knowledge from experience and their own passion-driven inquiry. School should be where each student develops an entrepreneurial mindset, which includes grit, resilience, mindfulness, empathy, creativity and resourcefulness. We need to start prizing creativity as high as numeracy and literacy—and fast. **P**

Sarah Prevette teaches creativity, innovation, and design thinking to some of the country's biggest business leaders. She is the founder of Future Design School, which transforms education by fostering entrepreneurship in a classroom setting. sarah@futuredesignschool.com